KOMAROVA, L.A.

Physiological action of ultraviolet rays of various wave lengths. Vop.kur., fizioter. i lech.fiz.kul't. no.4:13-17 O-D '55. (MIRA 12:12)

1. Iz kafedry fizioterapii Leningradskogo instituta usovershenstvovaniya vrachey imeni S.M. Kirova (zav. - prof. N.N. Mishchuk).
(ULTRAVIOLET RAYS, effects,
physiol. eff. of waves of various wave lengths)

KOMAROVA, L. A.

KOMAROVA, L., kandidat meditsinskikh nauk

In memory of Professor S.S.Zhikharev. Vop.kur.fizioter. i lech. fiz.kul't. 22 no.4:95 Jl-Ag '57. (MIRA 10:11)
(ZHIKHAREV, STEPAN SERGEEVICH, 1902-1956)

KOMAROVA, Lyudmila Aleksandrovna; VINOKUROV, D.A., red.; KHARASH, G.A., tekhn.red.

[Therapeutic and prophylactic use of ultraviolet rays] Lechebnoe i profilakticheskoe primenenie ul'trafioletovykh luchei. Leningrad, Gos.izd-vo med.lit-ry, Leningr.otd-nie, 1958. 98 p. (MIRA 13:4)

(ULTRAVIOLET RAYS--THERAPEUTIC USE)

KOMAROVA, L.A.

Evaluation of cutaneous vascular reactions during the action of ultraviolet and roentgen rays. Vest.derm.i ven. 34 no.6:5-10 '60. (MIRA 13:11)

1. Iz kafedry fizioterapii i lechebnoy fizkultury (zav. - prof. K.M. Smirnov) Leningradskogo gosudarstvennogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M. Kirova (dir. - dotsent A.Ye. Kiselev).
(SKIN) (ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT) (RADIOMETRY)

GRISHINA, Klavdiya Filatovna; KOMAROVA, Lyudmila Aleksandrovna; GOLENDBERG, A.D., red.; LEBEDEVA, Z.V., tekhn. red.

[Technique and method of performing physiotherapeutic procedures]Tekhnika i metodika provedeniia fizioterapevticheskikh protsedur; spravochnik dlia srednego meditsinskogo personala. Leningrad, Medgiz, 1963. 319 p. (MIRA 16:4)
(PHYSICAL THERAPY)

KOMAROVA, L.G.

Effect of synestrol and testosterone propionate on the course of experimental atherosclerosis. Farm. i toks. 22 no.3:238-242 My-Je '59.
(MIRA 12:7)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I. M. Sechenova.

(ARTERIOSCLEROSIS, experimental,
eff. of hexestrol & testosterone pripionate (Rus))
(STILBENES, eff.
hexestrol. on exper. arteriosclerosis (Rus))
(TESTOSTERONE, eff.
on exper. arteriosclerosis (Rus))

KOMAROVA, L.G.

Effect of butadione and corticotropin on the course of experimental atherosclerosis. Farm. i tokс. 23 no. 5:421-426 S-O '60.
(MIRA 13:12)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(BUTADIONE) (ACTH) (ARTERIOSCLEROSIS)

L 1127-66 EWT(m)/EPF(c)/EWP(j)/T/EWA(c)/ETC(m) RPL WW/JW/RM

ACCESSION NR: AP5022934 UR/0062/65/000/008/1462/1464
547.244 + 542.91

AUTHOR: Korshak, V. V.; Bekasova, N. I.; Komarova, L. G.

TITLE: Interaction of B-methyl-N-triphenylborazole with diisocyanates and diamines

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 8, 1965, 1462-1464

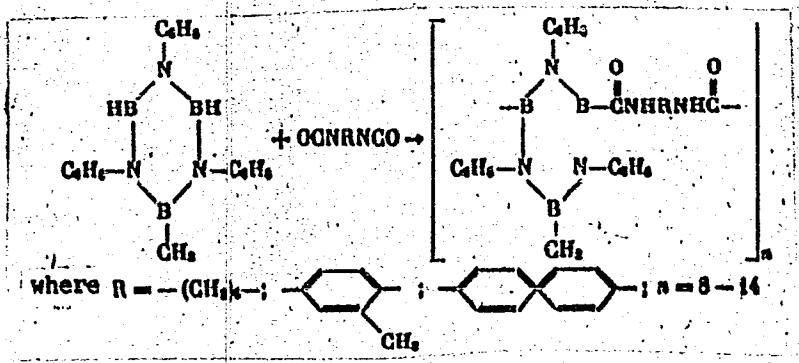
TOPIC TAGS: diamine, copolymer, polycondensate

ABSTRACT: Several linear copolymers and polycondensates of B-methyl-N-triphenylborazole with diisocyanates and diamines were prepared and characterized. The object of this work was to synthesize thermally stable (above 400°C) polymeric materials. Copolymers with hexamethylenediisocyanate, p-tolulenediisocyanate and 4,4'-diphenylenediisocyanate were synthesized according to the following scheme

Card 1/3

L 1127-66

ACCESSION NR: AP5022934

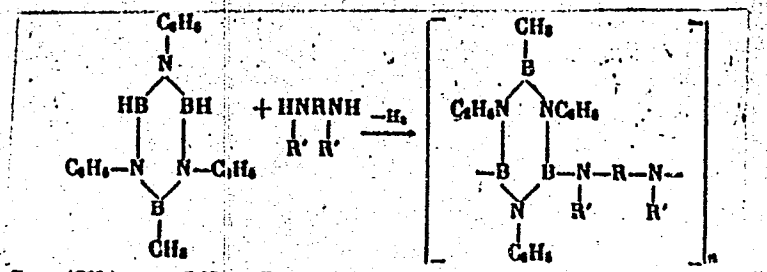


These are solids having 4,000-6,000 molecular weight. Their softening temperature is within the 100-110°C range and they begin to decompose above 100°C. Polycondensates of B-methyl-N-triphenylborazole with hexamethylenediamine, p-phenylenediamine, and N,N'-diisopropylhexamethylenediamine were synthesized according to the following scheme

Card 2/3

L 1127-66

ACCESSION NR: AP5022934



where R=—(CH$_2$)$_6$—; —C$_6$H$_4$—; R'=H; i-C$_3$H$_7$

Polycondensate with hexamethylenediamine was a brittle transparent solid with a softening temperature of about 70°C. It was stable up to 260°C and its reduced viscosity in cresole was 0.19. Polycondensate with p-phenylenediamine was a brittle transparent solid with softening temperature at 120°C and reduced viscosity in cresole 0.11. It was stable up to 300°C. An attempt to prepare a polycondensate with N,N'-diisopropylhexamethylenediamine was unsuccessful. Orig. art. has: 1 figure.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 03Nov64 ENCL: 00 SUB CODE: GC, OC

NO REF SOV: 002 OTHER: 001

Card 3/3

L 21140-65 EPA/EPF(c)/EPR/EPA(s)-2/EWA(h)/EWP(j)/EWT(m)/T Pc-4/Pr-4/Ps-4/
Pt-10/Peb RPL/ASD(m)-3 RM/WW/JW

ACCESSION NR: AP5001600 S/0062/64/000/012/2223/2224

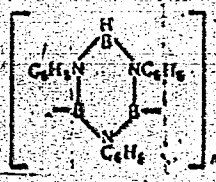
AUTHOR: Korshak, V. V.; Zamyatina, V. A.; Bekasova, N. I.; Komarova, L.G.

TITLE: Polycondensation of 1,3,5-triphenylborazine

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 12, 1964, 2223-2224

TOPIC TAGS: borazine, triphenylborazine, thermal stability, polymer

ABSTRACT: The thermal stability of 1,3,5-triphenylborazine (I) and 2-methyl-1,3,5-triphenylborazine (II) has been studied. Heating of I to 400—420C produced evolution of hydrogen and polycondensation to form a polymer with a molecular weight of 7000. The polymer is transparent and brittle and melts at above 500C; it is stable in air but partly hydrolizes in cold and boiling water. IR analysis suggests the following structure:



Card 1/2

L 21140-65
ACCESSION NR: AP5001600

Heating of II to 400C caused no polycondensation, and virtually no evolution of hydrogen. Apparently trifunctional borazine has a lower thermal stability than difunctional borazine. Orig. art. has: 2 formulas.

ASSOCIATION: Institut elementoorganicheskikh soyedinenly Akademii nauk SSSR (Institute of Organoelemental Compounds, Academy of Sciences, SSSR).

SUBMITTED: 04May64 ENCL: 01 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 003 ATD PRESS: 3165

Card 2/2

L 20242-65 EWP(e)/EWT(m)/EPF(n)-2/EWA(d)/EPR/EWP(t)/EWP(b) Ps-4/
Pu-4 MJW/JD/JG/WB/AT/WH

ACCESSION NR: AP5001593 S/0226/64/000/006/0068/0070

AUTHOR: Vladimirov, L. P.; Shusterman, M. I.; Konikova, R. S.; Komarova, L. P.

TITLE: Corrosion and erosion resistance of chromium-carbide alloys in multicomponent aggressive media

SOURCE: Poroshkovaya metallurgiya, no. 6, 1964, 68-70

TOPIC TAGS: chromium carbide, chromium carbide alloy, alloy corrosion, alloy erosion, alloy property, chromium carbide alloy corrosion, chromium carbide alloy erosion

ABSTRACT: The corrosion and erosion of chromium-carbide alloy (85% Cr_3C_2 and 15% Ni) in complex aggressive media has been investigated. The aggressive media tested included acid mother liquor of the coal tar industry, alkali solutions, and dry and humid hydrogen sulfide. The alloy displayed a high corrosion resistance both at normal and elevated temperatures (85—105C). Corrosion rates varied from 0 to 0.022 $g/m^2 \cdot hr$ in unregenerated alkali solution with pH over 12 at 20C to 0.030 (0.037 mm/year) $g/m^2 \cdot hr$ in mother liquor with pH = 1.1

Card 1/2

L 20242-65
ACCESSION NR: AP5001593

4

at 65C. The corrosion rate in hydrogen sulfide at 105C was 0.002 g/m^2·hr or 0.003 mm/year. Thus, the corrosion resistance of chromium-carbide alloy exceeds by several times that of stainless steel 1Kh18N9T and even titanium alloy BT-1. [JS] Because of its high hardness, strength, and wear, corrosion, and erosion resistance, the alloy can be used for ventilation parts and shut-off valves working in multi-component aggressive media. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Kommunarskiy gorno-metallurgicheskiy institut (Kommunarsk Mining-Metallurgical Institute); Kommunarskiy koksokhimicheskiy zavod (Kommunarsk Coke-Chemical Plant)

SUBMITTED: 12Sep63 ENCL: 00 SUB CODE: MM

NO REF SOV: 004 OTHER: 000 ATD PRESS: 3163

Card 2/2

KUZNETSOV, M.V.; KOMAROVA, L.I.; SAFRONOVA, L.P.

3,5-Dinitrobenzoyl hydrazide, a new reagent for a carbonyl group. Izv. AN SSSR. Otd.khim. nauk no.4:750-752 Ap '63. (MIRA 16:3)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

(Carbonyl group) (Benzoic acid)

ACCESSION NR: AP4019017 S/0062/64/000/002/0382/0384

AUTHORS: Shostakovskiy, M.F.; Komarova, L.I.; Pukhnarevich, V.B.; Komarov, N.V.; Roman, V.K.

TITLE: 3,5-dinitrobenzoylhydrazones of organo silicon carbonyl compounds

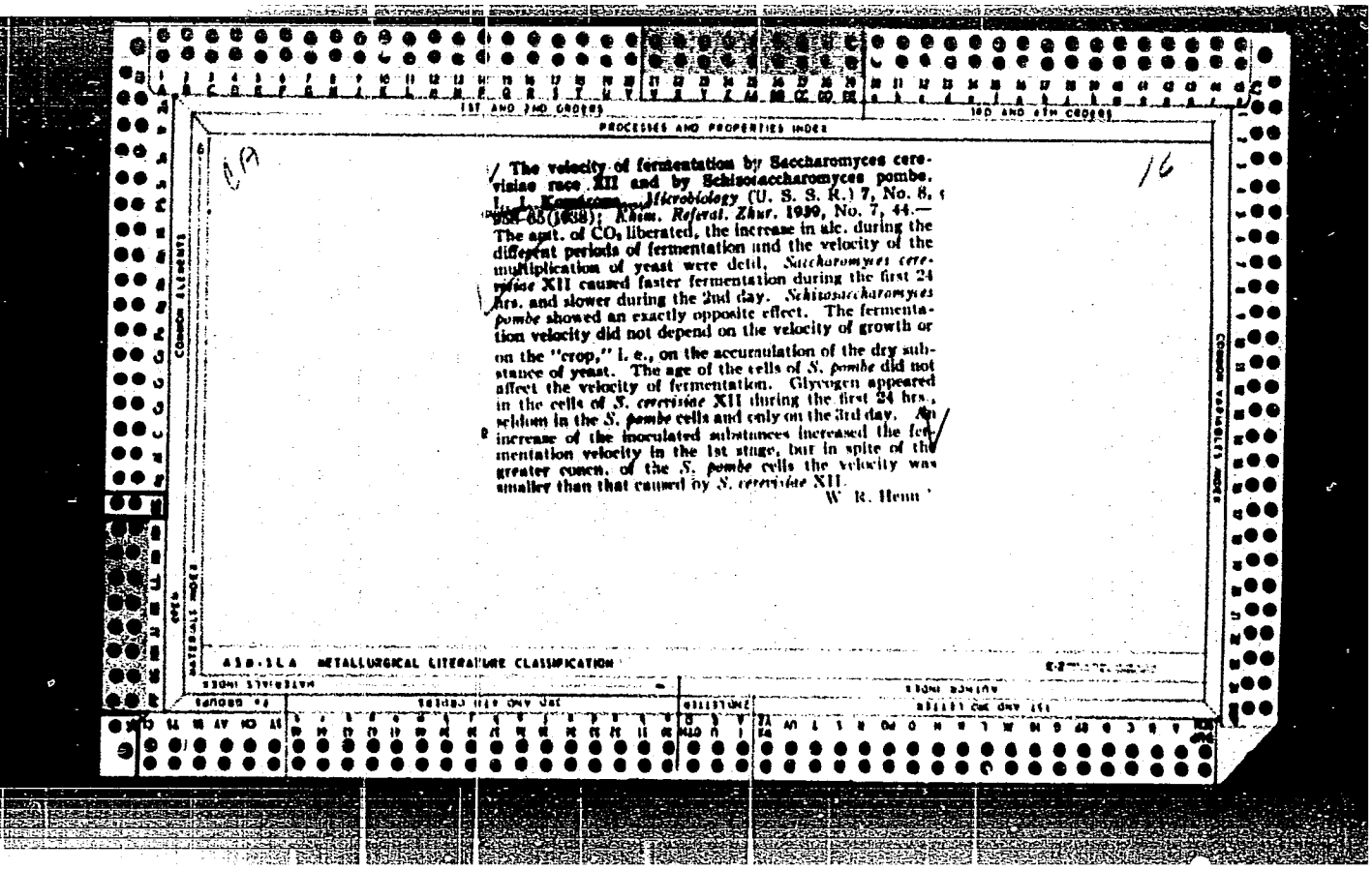
SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 2, 1964, 382-384

TOPIC TAGS: dinitrobenzoyl hydrazone, dinitrobenzoyl hydrazide, organo silicon carbonyl reagent, hydrazone, carbonyl

ABSTRACT: In the search for a reagent able to identify organo silicon carbonyl compounds, the authors found that 3,5-dinitrobenzoylhydrazide readily forms good crystallizing 3,5-dinitrobenzoylhydrazones with organo silicon aldehydes and ketones. In this respect, the reagent is different from 2,4-dinitrophenylhydrazine, semi-carbazide and hydroxylamine. The tendency of organo silicon aldehydes and ketones to form these compounds and yields greatly depends on their structure. Thirteen compounds were investigated from this point of view and their behavior recorded in a comprehen-

Card 1/2

Card 2/2



PROCESSES AND PROPERTIES INDEX

The velocity of fermentation by Saccharomyces cerevisiae race XII and by Schizosaccharomyces pombe. I. I. Kondrat'eva. *Mikrobiology* (U. S. S. R.) 7, No. 8, [illegible] 1938); *Khim. Referat. Zhur.* 1939, No. 7, 44.— The agst. of CO_2 liberated, the increase in alc. during the different periods of fermentation and the velocity of the multiplication of yeast were detd. *Saccharomyces cerevisiae* XII caused faster fermentation during the first 24 hrs. and slower during the 2nd day. *Schizosaccharomyces pombe* showed an exactly opposite effect. The fermentation velocity did not depend on the velocity of growth or on the "crop," i. e., on the accumulation of the dry substance of yeast. The age of the cells of *S. pombe* did not affect the velocity of fermentation. Glycogen appeared in the cells of *S. cerevisiae* XII during the first 24 hrs., seldom in the *S. pombe* cells and only on the 3rd day. An increase of the inoculated substances increased the fermentation velocity in the 1st stage, but in spite of the greater concn. of the *S. pombe* cells the velocity was smaller than that caused by *S. cerevisiae* XII.

W. R. Henn

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOMAROVA, L. I.

PA 14976

USSR/Biology - Microbiology Jul/Aug 49
Bacteriology

"Pipette for Making Cultures From a Single Cell," L. I. Komarova, All-Union Sci Res Inst of Alcohol Ind, Moscow, 2 pp

"Mikrobiologiya" Vol XVIII, No 4

Pipette can be used for transferring a drop 0.2 mm in diameter for cultures from a single cell. It is highly recommended for isolating small micro-organisms like bacteria. Diameter of the small end is 0.05 mm. Submitted 20 Feb 49.

14976

KOMAROVA, L. I.

Selection of yeast fermenting high concentration molasses. Tr. Inst. mikrobiol., Moskva no. 1:136-141 1951. (CLML 22:4)

1. All-Union Scientific-Research Institute of the Alcohol Industry.

KOMAROVA, L.I.

All-Union Scientific Research Institute of Alcohol Industry, Moscow.
"Effect of hard particles, intermixing and temperature on alcohol fermentation."
SO: MIKROBIOLOGIA, Vol. 20, No. 2, March/April 1951.

KOMAROVA, L.I.

British Abst.
B III
Aug. 1953
Fermentation Industries

Function of natural convection on alcoholic fermentation. L. I. Komarowa (*Mikrobiologiya*, 1952, 21, 579—583).—A full translation, given in *Mitt. Versuchssta. Gärungsgewerbe*, 1953, 7, 6—8, describes experiments to show the improvement in fermentation rate due to the mixing action of the evolved CO_2.

I. N. TURNER

Komarova L.P.

Effects of quaternary ammonium compounds on yeasts under various conditions. Lyu. P. Komarova (All-Union Sci. Research Inst. Alc. Ind., Moscow). *Mikrobiologiya* 22, 560–71(1953).—As disinfectants in filtered wort, hexadecylpyridinium bromide and hexadecylcephirol are effective at 0.0005%; at 0.002% they inhibit yeast proliferation and fermentation; at 0.0025% the inhibition is almost total. In unfiltered mash the antiseptic dose rises to 0.05%, which with hexadecylpyridinium bromide practically eliminates infectious fermentation. Liberal yeast inoculation and premixing tend to lessen the harmful effects of antiseptics on yeasts.
Julian P. Smith

KOMAROVA, L. K.

Diffusion under various conditions in lactic acid fermentation. L. Komarova (All-Union Sci. Research Inst. Alc. Ind., Moscow). Mikrobiologiya 23, 172-7 (1954).—Bacteria which are capable of remaining in suspension are much influenced by diffusion behavior in the medium, especially by convection currents set up by chem. or other action. Bacteria in suspension present a large cell surface to the medium, which favors diffusion. Tests with *Lactobacillus delbrueckii* in beer wort (sugar 12.5 g./100 ml.) showed a rise in cell count in 24 hrs. from 12,600 to 93,000 with no addn. and to 268,000 when $CaCO_3$ was added. Diffusion tests (with neutral red as stain) showed correspondingly large increases on adding $CaCO_3$. Julian F. Smith

KOMAROVA, L.I

IMSHENETSKIY, A.A., redaktor; KOMAROVA, L.I., redaktor; GRIKOVA, E.D. tekhnicheskiy redaktor.

[Isotopes in microbiology; transactions of the conference on the use of tagged atoms in microbiology] Izotopy v mikrobiologii; trudy konferentsii po primeneniiu mechenykh atomov v mikrobiologii. Moskva, Izd-vo Akademii nauk SSSR, 1955. 238 p. (MLRA 8:11)

1. Akademiya nauk SSSR. Institut mikrobiologii. 2. Chlen-korrespondent AN SSSR (for Imshenetskiy)
(Radioisotopes) (Microbiology)

KOMAROVA, L. I.

62 Effects of external factors on the temperature coefficient of acetone-butanol fermentation rates. L. I. Komarova (All-Union Sci. Research Inst. Alcohol Ind., Moscow). *Mikrobiologiya* 24, 208–16(1955).—The temp. coeff. of acetone-butanol fermentation is 2–4 or higher, sometimes up to 10. It is highest in the first stages of fermentation. When the temp. is raised from 23° to 37° the temp. coeff. decreases, and also if larger doses of inoculant are used. Acceleration of the microbiol. chem. reactions by raising temp. results both from cell activation and from increased concn. of reacting components. Julian F. Smith

KOMAROVA, L. I.

"Conference on the Production of Enzyme Preparations," Mikrobiologiya, 24, No.5, pp. 646-48, 1955

Translation U-8875, 20 Sep 56

KOMAROVA, L.I.

Scientific conference at the Institute of Microbiology of the Academy of Sciences of the U.S.S.R. Mikrobiologiia 24 no.6:750-751 N-D '55. (MLRA 9:4)

(YEASTS) (MICROSCOPY)

KOMAROVA, L.I.

Conference on the utilization of forestry waste products in animal husbandry. Mikrobiologiia 24 no.6:751-752 N-D '55. (MLRA 9:4)

(WOOD WASTE) (YEAST) (FEEDING AND FEEDING STUFFS)

KOMAROVA, L.I., kandidat biologicheskikh nauk.

At the Institute of Microbiology; session of scientific councils of two institutes. Vest. AN SSSR 25 no.8:78-79 Ag '55 (MLRA 9:1)
(Yeast)

KRYUCHKOVA, A.P.; KOMAROVA, L.I.

Vitamins in fodder yeasts. Gidroliz.i lesokhim.prom. 9 no.5:5-7 '56. (MLRA 9:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrolizhnoy i sul'fitno-spirtovoy promyshlennosti.
(Vitamins) (Yeast)

KOMAROVA, L.I.

Conference of young specialists at the Institute of Microbiology of the Academy of Sciences of the U.S.S.R. Mikrobiologiia 25 no.1: 134 Ja-F '56 (MLRA 9:5)

(MICROBIOLOGY)

FISHER, P.N.; KOMAROVA, L.I.

Production of yeast from hydrol. Gidroliz. i lesokhim.prom. 17 no.2:14-16 '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut biosinteza belkovykh veshchestv.

L 40972-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 JAJ/RM
ACCESSION NR: AP5006416 S/0062/65/000/001/0146/0154

AUTHOR: Korshak, V. V.; Rogozhin, S. V.; Sidorov, T. A.; Chou Jun-p'ei; Komarova, L. I.

TITLE: Preparation of polymer products from p-xylene, pseudocumene, and ditolylethane

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1965, 146-154

TOPIC TAGS: polymer, xylene, pyrolysis, pyrolysis polymerization

ABSTRACT: Polymer compounds were produced by thermal polydehydrocondensation of p-xylene, pseudocumene, and ditolylethane. These hydrocarbons were pyrolized on an incandescent metal wire located in a liquid monomer. The effect of temperature and time on the yield of polymers was investigated and it was found that the yield increased with both temperature and time. The structure of the polymers was investigated through analysis of their infrared spectra. The probable mechanism of the formation of polymer products was discussed. It was assumed that the soluble polymer of p-xylene is formed chiefly by branching of linear molecules, as a result of interaction with active radicals and the recombination of macroradicals with each other or with radicals forming from monomers, dimers, etc. Orig. art. has:

Card 1/2

L 40972-65
ACCESSION NR: AP5006416

9 figures, 5 tables, 2 equations.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elementoorganic Compounds, Academy of Sciences SSSR)

SUBMITTED: 19Feb63 ENCL: 00 SUB CODE: GC, OC

NO REF SOV: 001 OTHER: 002

Card 2/2

KORSHAK, V.V.; SIDOROV, T.A.; VINOGRADOVA, S.V.; KOMAROVA, L.I.; VALETSKIY, P.M.; LEBEDEVA, A.S.

Heterochain complex polyesters. Report No.52: Determination of double bonds in unsaturated polyarylates by infrared spectroscopy. Izv. AN SSSR Ser. khim. no.2:261-268 '65.
(MIRA 18:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 41306-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5008370 S/0190/65/007/003/0457/0461

AUTHOR: Korshak, V. V.; Vinogradova, S. V.; Korchevey, M. G.; Komarova, L. I.

TITLE: Thermal cross-linking of unsaturated polyarylates containing allyl side chains

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 457-461

TOPIC TAGS: polymer, polymer cross linking, polyarylate, allyl containing polyarylate polyarylic ester

ABSTRACT: Allyl-containing polyarylates (polyarylic esters) are of interest because of their ability to change into three-dimensional polymers by the interaction of the allyl groups with each other or with other monomers. This paper deals with the thermal hardening of three terephthalates of bisphenol A (4,4'-isopropylidenediphenol) and its diallyl derivative, incorporating phenolphthalein and 2-allylphenol. The polymers were prepared by conventional methods and subjected to the usual mechanical tests. Their degree of unsaturation was derived from infrared data. It was found that in the absence of oxygen, unsaturated allyl-containing polymers harden effectively above 230C. Atmospheric oxygen can initiate their polymerization. In the absence of oxygen, the conversion of double bonds is a zero-order reaction, up to

Card 1/2

L 41306-65

ACCESSION NR: AP5008370

approximately 50% conversion. To this degree of conversion, the activation energy is 30 ± 2 kcal/mol of allyl groups at 237—267C. Cross-linking improves appreciably the thermal stability of these polymers. Orig. art. has: 3 figures and 2 tables. [VS]

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 14May64 ENCL: 00 SUB CODE: OC,GC

NO REF SOV: 002 OTHER: 000 ATD PRESS: 3213

Card 2/2

AN SSSR. Izvestiya. Seriya Khimicheskaya,

Hydrazine, vinyl ester, nitrobenzoic acid, hydrazide synthesis

and 2,4- and 3,5-dinitrobenzoic acids with hydrazine hydrate showed that the
vigorous in the absence of catalysts and yields hydrazides of

Card 1/2

ASSOCIATION: Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR (Irkutsk Institute of Organic Chemistry, Siberian Branch, Academy of Sciences, SSSR)

SUBMITTED: 11Aug64 ENCL: 00 SUB CODE: OC

006 OTHER: 004

KORSHAK, V.V.; VINOGRADOVA, S.V.; KORCHEVEY, N.G.; KOMAROVA, L.I.

Thermal cross-linking of unsaturated polyarylates containing allyl side groups. Vysokom. soed. 7 no.3:457-461 Mr '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

KOMAROVA, L.I.; VASIL'YEVA, K.A.; FISHER, P.N.

Production of protein-carbohydrate fodder from straw and corncobs.
Sbor.trud. NIIGS 11:49-57 '63. (MIRA 16:12)

1. KOMAROVA, L. I.

2. USSR (600)

4. Chemical Reaction - Mechanism

7. "Diffusion and heat transfer in chemical kinetics." D. A. Frank-Kamenetskiy Reviewed by L. I. Komarova. Zhur. fiz. khim. 26, No. 10, 1952.

9. Monthly List of Russian Accessions. Library of Congress. March, 1953. Unclassified

KOMAROVA, L. I.

USSR/Chemistry - Reaction Kinetics Dec 53

"Role of Natural Convection in Chemical Reactions of the Chain Type," L. I. Komarova

Zhur Fiz Khim, Vol 27, No 12, pp 1882-4

There has been an extensive discussion between N. S. Akulov and N. N. Semenov, although the difference between the theories of these two investigators is not very great. Akulov did not criticize Semenov's results, but mainly objected to the fact that Semenov used his, Akulov's, equations without giving due credit. Both Semenov and Akulov make the error

275T18

of assuming that chain reactions (those of combustion and others) take place in a homogenous medium as far as concns of reacting substances are concerned. They disregard convection, which plays an important role in the acceleration of combustion, as has already been pointed out by N. A. Shilov.

USSR/Physics - Heat transfer

Card 1/1 Pub. 147 - 24/25

Authors : Komarova, L. I.

Title : The role of natural convection in heat transfer

Periodical : Zhur. fiz. khim. 28/10, 1866-1868, Oct 1954

Abstract : The role of natural convection in chemical kinetics and particularly its effect on the transfer of heat and substance, during the process of chemical reactions, is discussed. Various opinions of Russian scientists, regarding the role of natural convection in physical chemistry, are listed. Four USSR references (1947-1952).

Institution : .....

Submitted : May 24, 1954

5(4)

AUTHOR: Komarova, L. I.

SOV/76-32-12-14/32

TITLE: The Role of Natural Convection in the Kinetics of the Dissolution of Benzoic Acid in Sodium Hydroxide Solution (Rol' yestestvennoy konvektsii v kinetike rastvoreniya benzoynoy kisloty v rastvore yedkogo natra)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 12, pp 2748 - 2753 (USSR)

ABSTRACT: References 1(Levich) and 2(Akselrud) mention previous papers devoted to this question. At first, the reaction velocity rises with increasing concentration of the sodium hydroxide. The velocity of the natural convection is, in this case, approximately proportional to the reaction velocity. The velocity of dissolution is much higher than would correspond to the diffusion into a motionless medium. Thus, this effect is due to the convection. From 12 g/100ml sodium hydroxide solution the velocity of dissolution begins to decrease as the specific weight of the reaction product approaches that of the surrounding solution. At 16g/100ml

Card 1/2

The Role of Natural Convection in the Kinetics of the Dissolution of Benzoic Acid in Sodium Hydroxide Solution

SOV/76-32-12-14/32

NaOH the dissolution of benzoic acid practically stops. On adding indifferent matter, such as sucrose, to the sodium hydroxide solution the convection decreases because of the higher viscosity and, so does the reaction velocity. Many examples of the acceleration of heterogeneous reactions can be explained by convection. There are 2 figures, 3 tables and 3 Soviet references.

ASSOCIATION: Gidroliznyy institut, Moskva (Institute of Hydrolysis, Moscow)

SUBMITTED: June 27, 1957

Card 2/2

KOMAROVA, L. I.

"Natural Heat and Mass Transfer by Convection with Chemical Reactions."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

KOMAROVA, L. I.

"Natural Heat and Mass Transfer by Convection with Chemical Reactions"

Report presented at the Conference on Heat and Mass Transfer. Minsk, USSR, 5-10 June 61

The influence of three types of chemical reactions (as a result of which substances are being formed whose specific weights are equal or different if compared with that of initial product) on heat and mass transfer intensity is investigated.

KORSHAK, V.V.; KOMAROVA, L.I.; SIDOROV, T.A.

Infrared spectra of organic complexes of beryllium. Izv. AN SSSR. Otd.khim.nauk no.5:813-815 My '62. (MIRA 15:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Beryllium organic compounds—Spectra)

ACCESSION NR: AP3000128 S/0062/63/000/005/0912/0921

AUTHOR: Korshak, V. V.; Rogozhin, S. V.; Sidorov, T. A.; Chou Jun-P'ei; Komarova, L. I.

TITLE: Synthesis and the structure of polymeric compounds from saturated aromatic alkyl compounds

SOURCE: AN SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 5, 1963, 912-921

TOPIC TAGS: aromatic alkyl polymer preparation, ethylbenzene, cumol, p-cymol intermediates, di-isopropylbenzene intermediates

ABSTRACT: A useful and practical laboratory method has been developed for the preparation of alkylaromatic compounds by means of pyrolysis. The apparatus is constructed in such a way that the reaction can be controlled and the reaction results can be reproduced (see Figure 1, Enclosure 1). The maximum yield of polymeric products is reached when the temperature of a platinum wire traversing the length of the apparatus is heated to 750-800C at a constant time. Meanwhile, the quantity of gaseous products and oligomers sharply increase with the increase of temperature. At optimum conditions, the polymer yield is 40% of the total. The obtained polymers are hard colorless compounds which soften at a temperature of

Card 1/3

ACCESSION NR: AP3000128

50-90C, which are easily soluble in original starting materials, and which have molecular weights ranging from 2000 to 6000. The intermediates used for the synthesis of these polymeric compounds were ethylbenzene, cumol, p-cymol, and di-isopropylbenzene. Their structures were confirmed by infrared spectroscopy. An explanation is given to some reaction features of polydihydrocondensation. Orig. art. has: 2 tables, 4 graphs, 1 fig. and some structural forms.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organometallic Compounds, Academy of Sciences SSSR)

SUBMITTED: 29Jun62 DATE ACQ: 12Jun63 ENCL: 01

SUB CODE: CH NO REF SOV: 004 OTHER: 008

Card 2/3

ENCLOSURE: 1

ACCESSION NR: AP3000128

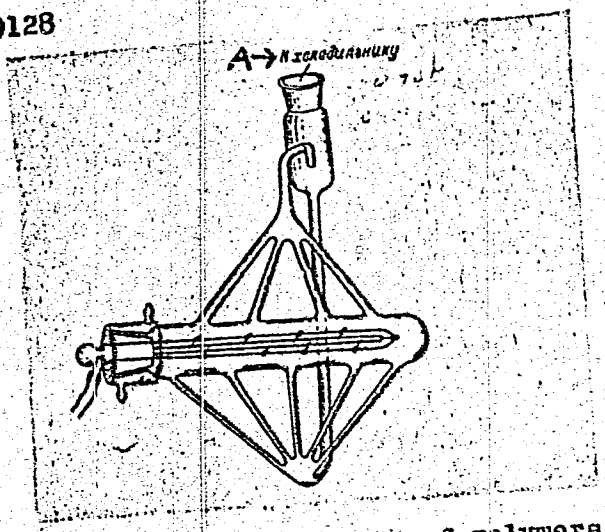


Fig. 1. Apparatus for the preparation of polymers by polyhydro-condensation. A - to condenser

Card 3/3

SHOSTAKOVSKIY, M.F.; KOMAROVA, L.I.; PUKHNAREVICH, V.B.; KOMAROV, N.V.; ROMAN, V.K.

3,5-Dinitrobenzoylhydrazones of organosilicon carbonyl compounds. Izv.AN SSSR.Ser.khim. no.2:382-384 F '64. (MIRA 17:3)

1. Irkutskiy institut organicheskoy khimii AN SSSR.

KORSHAK, V.V.; SERGEYEV, V.A.; KOZLOV, L.V.; KOMAROVA, L.I.

Thermal and thermo-oxidative degradation of phenol-formaldehyde oligomers of the novolak type. Plast. massy no.2:33-35 '66.
(MIRA 19:2)

37568

1/1600

S/226/62/000/001/004/014
1003/1201

Author: Vinogradov, G. A., and Komarova L. M.

Title: INVESTIGATION OF THE FREE FLOW OF METALLIC POWDERS UNDER ROLLING CONDITIONS.

Periodical: *Poroshkovaya metallurgiya*, no. 1(7), 1962, 27–33

Text: The free flow of iron, copper and aluminum powders in air and in vacuum was investigated, using funnels shaped like the working surfaces of rolling mill rollers. Rollers with various surface finishes rotating at different speeds and directions were also used. For rolling processes taking place in the air, the maximum free flow corresponds to a grain size of 10 for all powders investigated. For rolling processes taking place in vacum, however, the volume of the powders required for the process decreases regularly with decreasing particle size. The surface finish of the rollers affects consumption of the powders in the rolling process, whilst above the contact arc this consumption remains unaffected by both speed and direction of the rollers. It is proposed that the peripheral speed of the rollers should equal the linear speed of flow of the powder in the contact arc for the optimal rolling of powder materials. There are 8 tables and 6 figures.

Association: Institut metallokeramiki i special'nykh splavov AN UkrSSR (Institute of Powder Metallurgy and Special Alloys AS UkrSSR)

Submitted: October 24, 1961.

Card 1/1

KOMAROVA, L. M.

Radiation Chemistry in Two-Phase Systems

Tuesday Afternoon Session B—6—2 (Contd.)

(6)

The Role of Radiation-Induced Damage to Interphases in the Biological Action of Radiation

4

A. G. Pasynskiĭ, M. S. Volkova, A. M. Tongur and L. M. Komarova

The measurements of dry and moist samples of DNA in an electron microscope show that irradiation not only destroys DNA molecules but also causes them to coil up. The appearance of chemical cross-links in monolayers of DNA disturbs the structure and increases the area of the monolayer. A result of such a radiation-induced disturbance of the organization of the structure of thin surface layers (including nucleic acids) is a conspicuous change of their permeability. A considerable increase of enzymatic reaction rates after irradiation could be shown on a model system in which the enzyme peroxidase and the substrate ascorbic acid were separated by a layer of RNA about 160 Å thick. Similar phenomena are being investigated in systems with lipoproteid interphases. Radiation damage to the structural organization of membranes plays an important role in the disturbance of the oxidation rate of succinic acid by isolated liver mitochondria, and in leaf tissues of various plants (tea, beans, etc.) in which disruption of enzymatic oxidative processes occurs. The changes in intracellular molecular surfaces can be the source of all subsequent biochemical disturbances and of radiation disease in living cells.

Institute of Biological Chemistry, Academy of Sciences, Moscow, USSR

report presented at the 2nd Intl. Congress of Radiation Research, Harrogate/Yorkshire, Gt. Brit. 5-11 Aug 1962

VINOGRADOV, G.A.; KOMAROVA, L.M.

Investigating the free flowing properties of metal powders in connection with rolling conditions. Porosh.met. 2 no.1:27-33 Ja-F '62. (MIRA 15:8)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.
(Powder metallurgy)

ACCESSION NR: AR4018308 S/0137/64/000/001/G034/G034

SOURCE: RZh. Metallurgiya, Abs. 1G240

AUTHOR: Vinogradov, G. A.; Komarova, L. M.

TITLE: Study of the friability of metal powders

CITED SOURCE: Tr. Kuyby*shevsk. aviatn. in-t, vy*p. 16, 1963, 41-49

TOPIC TAGS: copper powder friability, aluminum powder friability, iron powder friability, powder rolling

TRANSLATION: A study was made of the friability of Cu, Fe, and Al powders as a function of particle size, and the effect of roughness and direction of rotation of the rolls on the friability of powders was investigated. Over the entire range of particle sizes the best flow characteristic was exhibited by the Cu powder, and the poorest, by Al powder. The improvement flow characteristic with decreasing particle size reaches a maximum at 100μ, after which this property of all the powders decreases sharply. The effect of the air contained in the powders increases with decreasing particle size, and for this reason very fine powders should be vacuum rolled. As the roughness of the rolls increases, the powder flow

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ACCESSION NR: AR4018308

characteristic decreases slightly. The speed and direction of roll rotation has no appreciable effect on the entry of freely poured powder into the zone of deformation. It was found that the best condition for pressing powder during rolling is the equality of the peripheral speed of the rolls and of the linear speed of pouring powder at the arc of contact (the process of compacting of the powder thereby approaches the process of static compacting). A. Epik

SUB CODE: MM ENCL: 00

Card 2/2

LUZKOVA, S.L.; KOMAROVA, L.N.

Diagnostic significance of a cytological examination of the spleen in diseases of the hemopoietic system. Lab. delo. no. 1:3-7 '65. (MIRA 18:1)

1. Gospital'naya terapevticheskaya klinika (zaveduyushchiy deystvitel'nyy chlen AMN SSSR prof. A.L. Myasnikov) I Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.

VLADIMIROV, L.P., kand. tekhn. nauk; SHUSTERMAN, M.I.; KONIKOVA, R.S.; KOMAROVA, L.P.

Corrosion and erosion resistance of VT-1 titanium alloys in multicomponent agressive media. Koks i khim. no.10:49-51 '63. (MIRA 16:11)

1. Kommunarskiy gornometallurgicheskiy institut (for Vladimirov).
2. Kommunarskiy koksokhimicheskiy zavod (for Shusterman, Konikova, (Komarova).

L 07933-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG/WB

ACC NR: AP6007114 SOURCE CODE: UR/0129/66/000/002/0048/0049

AUTHORS: Vladimirov, L. P.; Shusterman, M. I.; Konikova, R. S.; Komarova, L. P.

ORG: Kommunarsk Mining-Metallurgical Institute (Kommunarskiy gorno-metallurgicheskiy institut)

TITLE: Corrosion and erosion resistance of alloyed steels

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 2, 1966, 48-49

TOPIC TAGS: steel alloy, corrosion resistance, chromium containing alloy, molybdenum containing alloy, nickel containing alloy, EROSION, CORROSION RESISTANT ALLOY

ABSTRACT: A study was made of the possibility of replacing costly and scarce steels with cheaper varieties and still obtaining highly corrosion- and erosion-resistant alloys. In this investigation tests were conducted on chrome-nickel-copper, chrome-nickel-titanium, and chrome-nickel-molybdenum steels, and steels with reduced nickel content, chromium steels without nickel, bimetal from steel St. 3sp and 08Kh13, and for comparison purposes, steels St. 3, 14KhGS, titanium, and carbide-chromium alloys. It was found that not one of the tested materials exhibits absolute stability in the mother liquor at high or low temperature. Alloy VT1 demonstrated the best stability at high and low temperatures when combined with a carbide-chromium alloy with 15% Ni. Highly-alloyed chrome-nickel steels showed stability in heated mother liquor; particularly stable were steels Kh23N28M3D3T, Kh17N13M2T, and Kh25N15MDA. The

Card 1/2 UDC: 669.14.018.84:620.193.47

L 07933-67

corrosion rate of these materials was less than 0.1 mm/year. Steels not alloyed with titanium, steels with low content of chrome and nickel and with not greater than 2% molybdenum content can be used for work in the mother liquor, but they are less stable than the alloys listed above. Other materials tested were found to be unsuited for use in these conditions. Orig. art. has: 1 table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 001

Card 2/2 egk

VLADIMIROV, L.P.; SHUSTERMAN, M.I.; KONIKOVA, R.S.; KOMAROVA, L.P.

Corrosion and erosion resistance of chromium carbide alloys in multicomponent aggresive media. Porosh. met. 4 no.6: 68-70 N-D '64. (MIRA 18:3)

1. Kommunarskiy gorno-metallurgicheskiy institut i Kommunarskiy koksokhimicheskiy zavod.

VLADIMIROV, L.P.; SHUSTERMAN, M.I.; KONIKOVA, R.S.; KOMAROVA, L.P.

Erosion-resistant materials for the hydraulic transportation of slag. Mat. i gornorud. prom. no.6:71 N-D '64.
(MIRA 18:3)

VLADIMIROV, L.P., kand.tekhn.nauk; KONIKOVA, R.S., inzh.; KOMAROVA, L.P., inzh.

Low-alkali glass tubes and their corrosion resistance. Stek. i ker. 21 no.9:7-9 S '64. (MIRA 18:4)

1. Kommunarskiy gorno-metallurgicheskiy institut (for Vladimirov). 2. Kommunarskiy koksokhimicheskiy zavod (for Konikova, Komarova).

VLADIMIROV, L.P.; SHUSTERMAN, M.I.; KONIKOVA, R.S.; KOMAROVA, L.P.

Testing the resistance to corrosion and erosion of SNP plastics in the agressive media of coke chemicals production. Plast.massy no.6:54-56 '64. (MIRA 18:4)

VLADIMIROV, L.P.; KONIKOVA, R.S.; KOMAROVA, L.P.

Resistance of polystyrol to aggressive media of coke and coal chemical production and to various acids. Plast. massy no.10: 57-58 '65. (MIRA 18:10)

L 39515-66 EWP(e)/EWT(m)/EWP(j)/T/EWA(h)/ETC(m)-6/EWA(l) WW/GD/DJ/RM/WH
ACC NR: AP6014664 SOURCE CODE: UR/0314/65/000/007/0033/0034

AUTHOR: Vladimirov, L. P. (Candidate of technical sciences); Shusterman, M. I. (Engineer); Konikova, R. S. (Engineer); Komarova, L. P. (Engineer)

ORG: none

TITLE: Corrosion and erosion resistance of slagositalls in corrosive media

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 7, 1965, 33-34

TOPIC TAGS: corrosion resistance, erosion, bend strength, high temperature strength, hardness, compressive strength, thermal expansion, slag, blast furnace, porcelain, glass, glass property

ABSTRACT: Slagositall is a solid, opaque and microcrystalline substance with a glass base. Its bend strength and high-temperature strength at 1450 C is three times higher than ordinary glass. Its hardness is greater than that of quartz.

The high compressive strength (16,000 kg/cm^2), resistance to corrosive media, low coefficient of thermal expansion, high hardness and wear resistance and low cost (35-60 rubles/ton) makes it possible to use slagositall as a structural and lining material in various branches of industry.

This particular work by the authors delves into the corrosion and erosion resistance of slagositalls in corrosive media of the coke and chemical industry. Erosion resistance was determined in a slag-water pulp under conditions of hydraulic conveyance of granulated blast furnace slag.

Slagositalls grade 109 and 109g and porcelain, produced by the Avtosteklo Plant, were erosion and corrosion tested for 240 hours under varying conditions.

Card 1/2 UDC: 620.1

L 39515-66
ACC NR: AP6014664

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000824110008-7"

Gas corrosion testing was carried out in an autoclave under an atmosphere of hydrogen sulfide. Ammonium sulfate, the mother liquor of the plant, was the primary corrosive agent. Regenerated, purified, and concentrated solutions were used. Dry hydrogen sulfide and a mixture of hydrogen sulfide and steam were also used. These tests showed that there is some weight loss in all cases with the greatest loss occurring, naturally, in the concentrated solution. Gas corrosion tested indicated very little loss of weight. Erosion tests of the materials in the slag pulp showed that both grades of slagositalls to undergo the same extent of uniform wear while the porcelain is not quite as good as the slagositalls. Orig. art. has: 2 figures and 1 table. [JPRS]

SUB CODE: 11, 20 / SUBM DATE: none

Card 2/2 vmb

KOMAROVA, L.S.

ANDREYEVA, Ye.A.; ZHUKOV, V.I.; BULAYEV, V.I.; VALUYSKAYA, D.P.; KOMAROVA, L.S., red.; DMMIDOV, Ya.F., tekhn.red.

[Bituminous coatings for cathode protection] Bitumnye pokrytiia v usloviiakh katodnoi zashchity; nauchnoe soobshchenie. Moskva, Otdel nauchno-tekhn.informatsii, 1957. 13 p. (MIRA 11:2)
(Electrolytic corrosion) (Pipelines)

BAKSHEYEVA, S.I.; SEMENOV, B.N., kand.tekhn.nauk, red.; KOMAROVA, L.S., red.; DEMIDOV, Ya.F., tekhn.red.

[Analyzing economic aspects of using various methods in making elements of underground crossings of main pipelines] Analiz ekonomichnosti metodov proizvodstva rabot po zagotovke elementov podzemnykh perekhodov magistral'nykh truboprovodov. Moskva, Otdel nauchno-tekhn.informatsii, 1959. 82 p. (MIRA 13:4)
(Pipelines)

KRINITSIN, Mikhail Isaakovich; KLIMOV, Vyacheslav Ivanovich; KOMAROVA, L.S., red.; DEMIDOV, Ya.F., tekhn. red.

[Pipe laying in rocky soil: earthwork] Prokladka truboprovodov v skal'nykh gruntakh; zemlianye raboty. Moskva, VNIIST GLAVGAZA SSSR. Redaktsionno-izdatel'skii otdel, 1961. 53 p. (MIRA 14:11)
(Pipe) (Earthwork)

SKOMOROVSKIY, Ya.Z.; KOMAROVA, L.S., red.; DEMIDOV, Ya.F., tekhn. red.

[Free flexure of large diameter pipes in the construction of main pipelines]Svobodnyi izgib trub bol'shogo diametra na stroitel'stve magistral'nykh truboprovodov. Moskva, Otdel nauchno-tekhn.informatsii, 1960. 51 p. (MIRA 15:8)
(Pipelines)

KOMAROVA, L. S.

21

PHASE I BOOK EXPLOITATION SOV/6098

Assonov, V. A., and L. A. Paporotskiy, Resp. Eds.

Novoye v sredstvakh i sposobakh vzryvaniya (New Developments in Blasting Means and Methods). Moscow, Gosgortekhizdat, 1962. 124 p. (Series: Vzryvnoye delo; Sbornik no. 48/5) Errata slip inserted. 3000 copies printed.

Sponsoring Agency: Nauchno-tekhnicheskoye gornoye obshchestvo.

Ed. of Publishing House: A. Ya. Koston'yan; Tech. Eds.: L. I. Minsker and G. M. Il'inskaya.

PURPOSE: The book is intended for mining engineers, workers in scientific research and planning organizations, and also for teachers and students of mining and technical schools.

COVERAGE: This collection of articles describes new blasting means and methods, means of protecting electric detonators from stray currents, and improved methods of short-delay detonation.

Card 1/6

DAVYDOV, S.A.; KOMAROVA, L.S.

Industrial testing of commercially produced KZDSh-58 pyrotechnical relays. Vzryv. delo no.48/5:111-112 '62. (MIRA 15:9)

1. Proizvodstvenno-eksperimental'noye upravleniye tresta Soyuzvzryvprom.

(Electric relays--Testing)
(Blasting)

SAVCHENKO, A.F.; KOMAROVA, L.S.

Deformations of inter-chamber pillars in the K.Libknekht pits Nos. 1 and 2 of the "Artemsol'"Mining Administration. Sbor. nauch. trud. UkrNIISol' no.7:13-20 '64
(MIRA 18:1)

Effect of the system of development adopted in pit No.3 of the "Artemsol'" Mining Administration on the inter-chamber pillars. Ibid.: 20-24

KOMAROVA, L. V.

PA 78T5

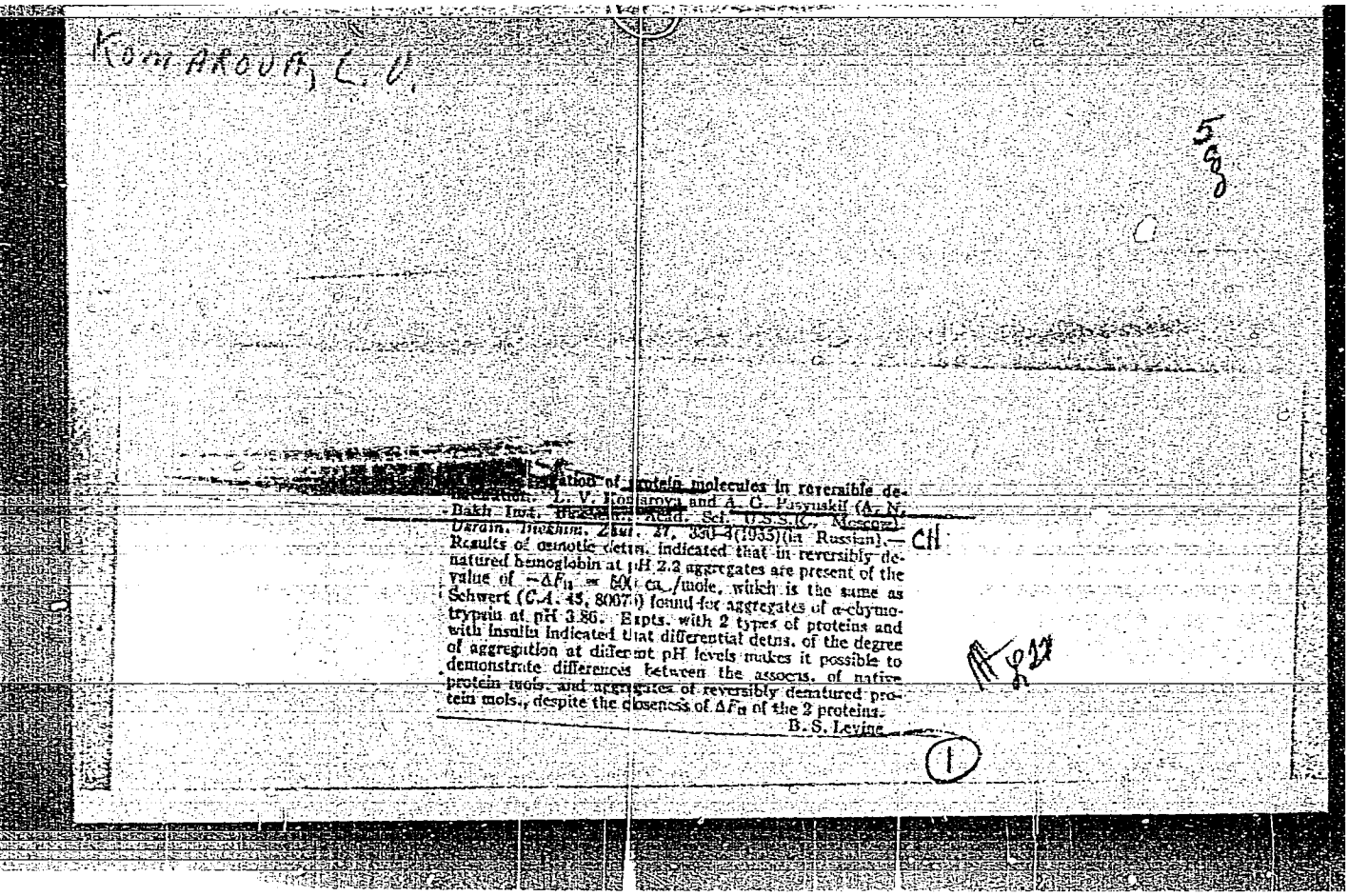
USSR/Chemistry - Colloids May/Jun 1948
Chemistry - Polymers

"Research on the Lyophilic Colloid Systems, II, Lyophilic and Lyophobic Sols of High Polymers," S. A. Glikman, L. V. Komarova, Lab of Colloidal Chem, Saratov State U, 13 pp

"Kolloid Zhur" Vol X, No 3

Details studies of the lyophobic colloidal systems of high polymers. Used nephelometric system to determine the degree of dispersion in the sols. Submitted 26 Dec 1946.

78T5



Komarov, L. V.

580

[illegible] of protein molecules in reversible de-
[illegible] L. V. Komarova and A. G. Pasynskii (A. N.
Bakh Inst. Biochem., Acad. Sci. U.S.S.R., Moscow).
Biokhim. Zhur. 27, 331-4(1935)(in Russian).—CH
Results of osmotic detns. indicated that in reversibly de-
natured hemoglobin at pH 2.2 aggregates are present of the
value of $-\Delta F_H$ = 80(cal./mole, which is the same as
Schwert (C.A. 45, 8007i) found for aggregates of α-chymo-
trypsin at pH 3.86. Expts. with 2 types of proteins and
with insulin indicated that differential detns. of the degree
of aggregation at different pH levels makes it possible to
demonstrate differences between the assocns. of native
protein mols. and aggregates of reversibly denatured pro-
tein mols., despite the closeness of ΔF_H of the 2 proteins.
B. S. Levine

(1)

KOMAROVA, L.V.; PASYNSKIY, A.G.

Aggregation of protein molecules in reversible denaturation. Ukr.biokhim.zhur. 31 no.1:5-11 '59. (MIRA 12:6)

1. Yaroslav Medical Institute, A.N.Bakh Institute of Biochemistry, Moscow.

(PROTEINS)

VOLKOVA, M.S.; KOMAROVA, L.V.; PASYNSKIY, A.G.

Binding of labeled methionine-S^{35} by proteins. Biokhimiia 25 no. 3:422-426 My-Je '60. (MIRA 14:4)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R., Moscow, and Medical Institute, Yaroslavl.
(METHIONINE) (PROTEIN METABOLISM)

PASYNSKIY, A.G.; VOLKOVA, M.S.; KOMAROVA, L.V.

Effect of radiation damage to the nucleoprotein and lipoprotein interfaces on the enzyme reaction rate. Radiobiologiia 4 no.1:29-35 '64. (MIRA 17:4)

ACCESSION NR: AP4015081 S/0205/64/004/001/0029/0035

AUTHOR: Pasynskiy, A. G.; Volkova, M. S.; Komarova, L. V.

TITLE: Effect of radiation damaged nucleoprotein and lipoprotein separating membrane surfaces on enzyme reaction rates

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 29-35

TOPIC TAGS: radiation damage, nucleoprotein membrane surface, lipoprotein membrane survace, enzyme reaction rate, substrate oxidation rate, dehydrogenation reaction, radiosensitivity, membrane surface permeability, lipoid component, RNA

ABSTRACT: Nucleoprotein and lipoprotein membrane surfaces separating the enzyme from the substrate were studied in a series of experiments. Nucleoprotein membrane surfaces were investigated in irradiated crystalline peroxidase suspensions in which the particles were separated from the ascorbic acid substrate by a thin ribonucleoprotein film (radiation doses not given). Lipoprotein membrane surfaces were investigated in irradiated (20-70 kr doses) artificial lipoprotein complexes and in isolated rat liver mitochondrion suspensions. Enzyme reactions were determined in the peroxidase suspensions and in the

Card 1/3

ACCESSION NR: AP4015081

artificial lipoprotein complexes by substrate oxidation rates. In the mitochondrion suspensions a polarographic method was used to determine the dehydrogenation reaction of succinic acid to fumaric acid catalyzed by succinodehydrogenase, a mitochondrion enzyme. Findings show that nucleoprotein membrane surfaces are highly radiosensitive and their enzyme reactions are accelerated by 30-40% as a result of increased permeability of the radiation damaged surfaces. But, lipoprotein membrane surfaces display high radioresistance to doses up to 50 kr and enzyme reactions do not change. Radioresistance of the lipoprotein membrane surface is attributed to its lipoid component which has the capacity to spread out and protect the membrane from increased permeability and other structural damage. Nucleoprotein membrane surface permeability is affected by as few as 1 to 2 ionizations taking place in a membrane surface layer containing over 1,000 RNA molecules. Thus, nucleoprotein membrane surfaces play an important role in the development of biochemical damage in the cell. Orig. art. has: 4 figures.

ASSOCIATION: None

Card 2/3

Enzymatic hydrolysis of serum albumin modified by p, p'-difluor-m, m'-dinitrodiphenyl sulfone. Ukr. biokhim. zhur. 36 no. 4:521-526 '64. (MIRA 18:12)

1. Yaroslavskiy meditsinskiy institut i Institut pitaniya AMN SSSR, Moskva. Submitted Sept. 26, 1963.

BUCHIN, P.I.; ZININ-BERMES, N.N.; PROTSENKO, O.A.; KOMAROVA, M.A.

Data on the dysenterial and typhoid-paratyphoid bacteria carrier states in the bodies of white rats during peroral infection in an experiment. Zhur. mikrobiol. epid. i immun. 32 no.6:136-137 Je '61. (MIRA 15:5)

1. Iz Kemerovskogo meditsinskogo instituta.
(SHIGELLA) (SALMONELLA)

POKALEV, G.M.; PAROKHONYANK, Z.M.; KLEMENOV, V.I.; KOMAROVA, M.A.; [redacted]OKINA, L.I.

Dynamics of the mechanical activity of the heart under the influence of acupuncture in the area of the Chinese points. Sbor. trud. GMI no.9:108-114 '62. (MIRA 17:2)

1. Kafedra gospital'noy terapii lechebnogo fakul'teta Gor'kovskogo meditsinskogo instituta (zav. kafedroy prof. V.G. Vogralik).

KOMAROVA, M. F., PODRESOV, L. I., and BUYNOV, N. N., (Sverdlovsk)

"

"The Investigation of the Precipitation in the Alloy Ni-Be," a paper submitted at the International Conference on Physics of Magnetic Phenomena, Sverdlovsk 23-31 May 56.

KOMAROVA, M.F.

AUTHORS: Buynov, N. N., Podrezov, L. I., Komarova, M. F. 48-9-2/26

TITLE: An Investigation of the Decomposition of an Ni-Be Alloy (Issledovaniye raspada v splave Ni-Be).

PERIODICAL: Izvestiya AN SSSR Seriya Fizicheskaya, 1957, Vol. 21, Nr 9, pp. 1220-1224 (USSR).

ABSTRACT: For the purposes of this investigation a nickel-beryllium alloy was produced in a high-frequency vacuum furnace. The alloy contained apart from 1,9% Be: 1,25 % Fe, 0,12 % Al, 0,16 % Cu, 0,15 % Si and traces of Mg. Afterwards the alloy was forged in a hot state and homogenized at 1100°C for 15 hrs. On the basis of structural analysis conducted by electron microscope and X ray investigation of strength and coercive force together with data from literature it is shown that the composition of the Ni-Be alloy takes place in two stages, just as the decomposition of Al-Cu-, Al-Ag- and Al-Zn-alloys. In the first stage of the decomposition, zones are formed, enriched with the alloyed component, together with considerable elastic deformations, leading to elastic distortions of the black structure. The state of maximum strength is connected with this stage. It can be assumed, that the localization zones and domains of elastic deformation show

Card 1/2

only weak resistance to magnetic reversal, because the coercive force varies only very little in the first stage of decomposition. In the second stage of decomposition a zonal transformation into particles of the β-phase takes place in the alloy. Correspondingly the coercitive force of the alloy increases from a few Oerstedt to about 80 Oe. Finally it is stated, that the large coercitive force of the Ni-Be alloy is connected with the formation of particles of the β-phase, and not with the existence of stress.
There are 6 figures, 1 table and 12 references, 7 of which are Slavic.

ASSOCIATION: Institute for Metal Physics of the UFAN USSR (Institut fiziki metallov UFAN SSSR.).

AVAILABLE: Library of Congress.

Card 2/2

KOMAROVA, M.F.

18.1210

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SOV/126-8-3-10/33

AUTHORS: Buynov, N.N., Shchegoleva, T.V., Rakin, V.G., Komarova, M.F. and Zakharova, R.R.

TITLE: Electron Microscopic Investigation of Etch Figures in Age Hardening Aluminium Alloys

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 3, pp 387-393 (USSR)

ABSTRACT: The results of an electron microscopic investigation of dimensions, form and structure of etch figures in age hardening aluminium alloys are discussed. In the table on p 388, data of the dimensions and shape of the etch figures for various alloys are given. The dimensions of the figures change within very wide limits from several microns to a few tenths. It is characteristic that for the majority of quenched, slightly aged specimens the etch figures are straight-sided (Fig 1) and for the hardened alloys they have an oval shape (Fig 2). Their dimensions decrease in relation to time and artificial ageing, when the hardness of the alloys increases. In Fig 3, an electron micrograph of an Al-Zn-Cu (1.0% Zn and 0.5% Cu) alloy, deformed by compression by 15% and aged at 180°C for 6 hours, is shown.

Card 1/2

L 34073-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/JG/JH

ACC NR: AP6018944 SOURCE CODE: UR/0126/66/021/006/0858/0867

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B

AUTHOR: Komarova, M. F.; Buynov, N. N.; Lerinman, R. M.; Savina, L. P.

ORG: Institute of the Physics of Metals, AN UkrSSR (Institut fiziki metallov AN UkrSSR)

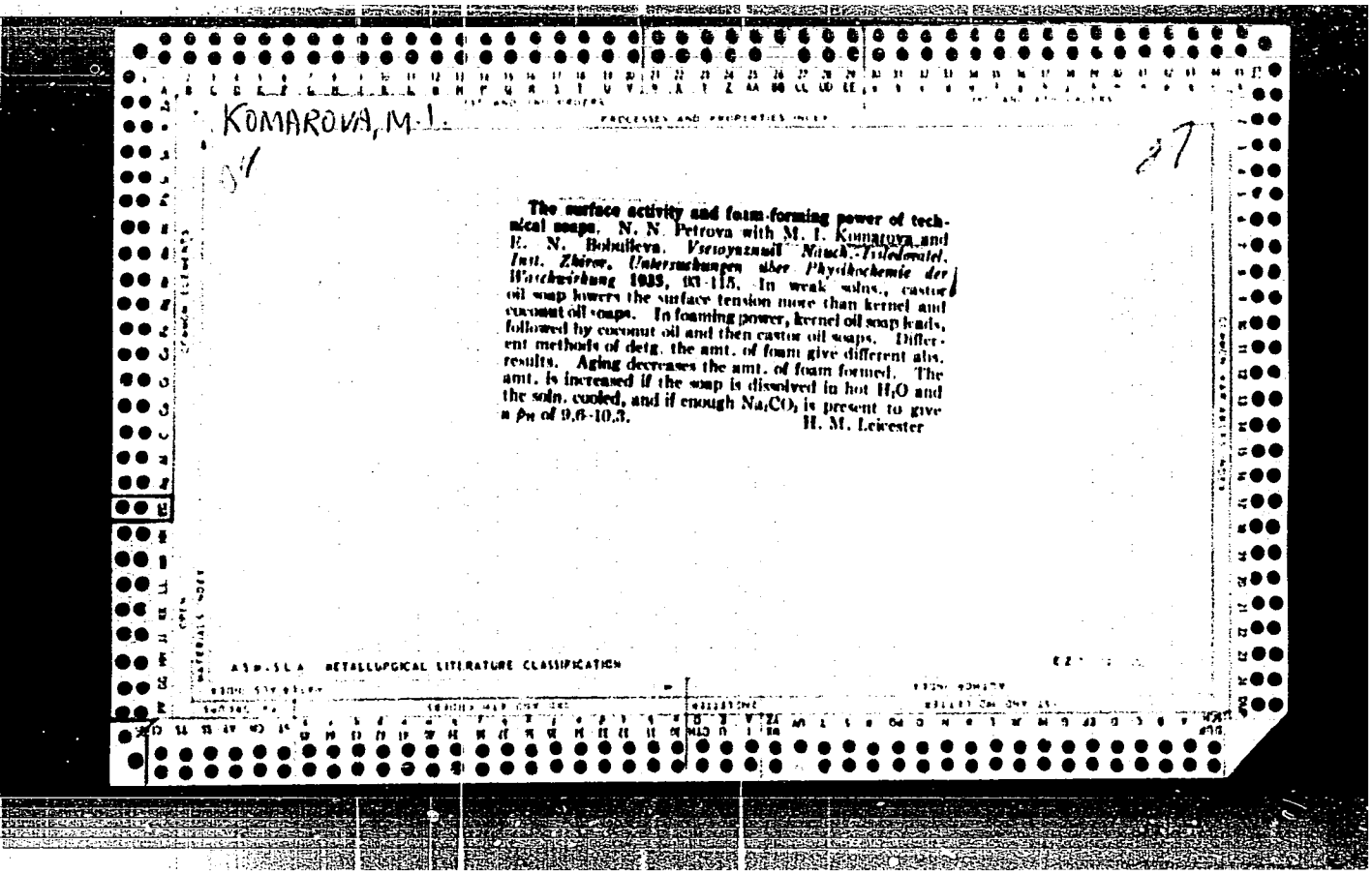
TITLE: Effect of silver addition on the structure and kinetics of decomposition of the solid solution of aluminum-magnesium alloys

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 6, 1966, 858-867

TOPIC TAGS: aluminum alloy, magnesium containing alloy, silver containing alloy, alloy aging, alloy hardness, alloy structure

ABSTRACT: Experiments have been made to determine the effect of silver additions on the mechanism of aging and strengthening of binary Al-Mg alloys containing 10—12% Mg. Ingots of binary Al-11% Mg alloys and of ternary alloys containing additions of 0.1, 0.3, or 1% Ag were homogenized at 430C before and after upsetting with a reduction of 50% and, after solution heat treatment at 430C and water quenching, were aged at 150—225C for various periods of time up to 500 hr. Hardness measurements showed that the hardness of unaged alloys with 0.1 and 0.3 and 1% Ag was higher by 5 and 9—10 HRB units, respectively, than the hardness of the binary alloys. In aging, addition of silver accelerated the decomposition of the solid solution, which resulted in a much more rapid onset of the increase in hardness and in much quicker

Card 1/2 UDC: 548.53:546.3-19'621'46



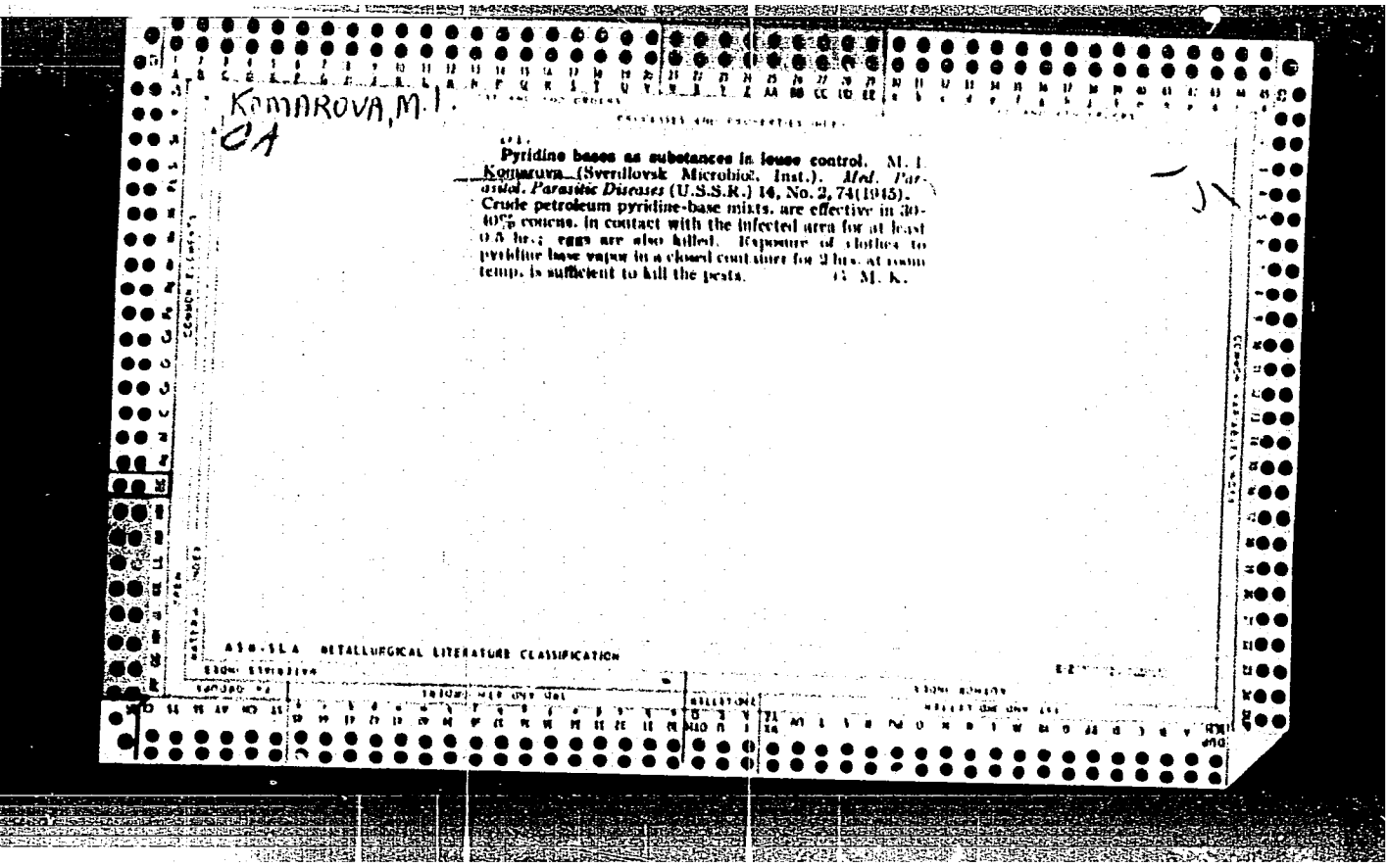
KOMAROVA, M. I.

27

The surface activity and foam-forming power of technical soaps. N. N. Petrova with M. I. Komarova and E. N. Bobulieva. *Vsesoyuznyi Nauch.-Issledovatel. Inst. Zhirov. Untersuchungen über Physikochemie der Waschwirkung* **1935**, 103-115. In weak solns., castor oil soap lowers the surface tension more than kernel and coconut oil soaps. In foaming power, kernel oil soap leads, followed by coconut oil and then castor oil soaps. Different methods of detg. the amt. of foam give different results. Aging decreases the amt. of foam formed. The amt. is increased if the soap is dissolved in hot H_2O and the soln. cooled, and if enough Na_2CO_3 is present to give a *Ph* of 9.6-10.3.

H. M. Leicester

A S M-S L A METALLURGICAL LITERATURE CLASSIFICATION



KOMAROVA, M. I.

OA

Pyridine bases as substances in louse control. M. I. Komarova (Sverdlovsk Microbiol. Inst.). *Med. Parasitol. Parasitic Diseases* (U.S.S.R.) 14, No. 2, 74(1945). Crude petroleum pyridine-base mixts. are effective in 30-40% concns. in contact with the infected area for at least 0.5 hr.; eggs are also killed. Exposure of clothes to pyridine base vapor in a closed container for 2 hrs. at room temp. is sufficient to kill the pests. G. M. K.

A50-5LA METALLURGICAL LITERATURE CLASSIFICATION

FILATOV, N.V.; KOMAROVA, M.K.

Machine units for continuous harvesting of grain and straw of grain crops. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.inform.16 no.5:52-56'63. (MIRA 16:7)
(Harvesting machinery)

KOMAROVA, Mariya Kuz'minichna; NEDOVESOV, Viktor Ivanovich; ZELENETSKAYA, L.V., red.

[Controlling the loss of headed grain] Bor'ba s poteriami zernovykh kolosovykh. Moskva, Rossel'khozizdat, 1965. 83 p. (MIRA 18:9)

KOMAROVA, M.K.; FILATOV, N.V.; DMITRIYEV, L.A., red.

[Overall mechanization of straw harvesting] Kompleksnaia uborka solomy. Moskva, Rossel'khozizdat, 1964. 51 p. (MIRA 17:7)

1. Vserossiyskiy nauchno-issledovatel'skiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (for Komarova, Filatov).

KOMAROVA, M.S.

~~CTRSPL Vol. 5 No. 1 Jan. 1952~~

nitology

Komarova, M.S. (Lvov State Medical Institute), The life cycle of *Asymphylodora tincae* Modeer (*Trematodes-Digenea*), 177-8

Akademiya Nauk, S.S.S R., Doklady Vol. 78, No. 2, 1951

KOMAROVA, M.S.

PARASITES

"Seasonal Dynamics of the Parasitic Fauna of Tench in the Donets River" by M.S. Komarova, Zoologicheskiy Zhurnal, No 5, May 1957, pp 654-657.

The author describes her two year investigation of the parasitic fauna of tench. The investigation was made in the vicinity of the town of Zmiyev, on the Donets River. The data are given in detail.

A complete parasitological investigation revealed that 100% of the tench were infected with different species of parasites as follows: 1 species of Mastigophora; 1 species of Sporozoa; 5 species of Trematoda; 5 species of Cestoda; 1 species of Nematoda; 1 species of Acanthocephala; 1 species of Hirudinea; 1 species of Lamellibranchiata; and 2 species of Crustacea.

Chair of Biology, Khar'kov med Inst.

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KOMAROVA, M.S.

USSR/Zooparasitology - Parasitic Worms. G-1

Abs Jour : Ref Zhur - Biol., No 5, 1958, 19594

Author : Komarova, M.S.

Inst :

Title : Seasonal Dynamics of Parasitofauna on Tench from the Northern Donetz.

Orig Pub : Zool. zh., 1957, 36, No 6, 654-657

Abstract : As a result of the study of 120 tenches in April, July, October and December it was established that the parasitofauna of tenches are considerably fewer during winter than during summer. The range of the number of species seasonally is due to adaptation of parasites to different seasons of the year. The seasonal influence reflects the life activity of helminths and malacostraca: when the water temperature is lowered, malacostraca Gammarus sieboldi do not produce any eggs; in helminths

Card 1/2

Yur'yevna, assistent [deceased]; MOROZOVA, Nina Vladimirovna, assistent; KOMAROVA, M.V., red.

[Principles of industrial electronics and automatic control] Osnovy promyshlennoi elektroniki i avtomatiki. [n.p.] Vysshaia shkola, 1964. 86 p. (MIRA 17:11)

1. Kafedra "Promyshlennaya elektronika i avtomatika" Moskovskogo avtomobil'no-dorozhnogo instituta im. Molotova.

KOMAROVA, M.V.

Regionalization of the southwestern Black Sea region according to the degree of the aridity of the climate. Izv. Vses. ob-va 97 no. 1:66-70 Ja-F '65. (MIRA 18:3)

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[Special-purpose rolling stock in automotive transportation] Spetsializirovannyi podvizhnoi sostav avtomobil'nogo transporta. [n.p.] Rosvuzizdat, 1963. 127 p. (MIRA 17:3)

ESTERKIN, Mikhail Samoylovich; KOMAROVA, M.V., red.; LARIONOV, G.Ye., tekhn. red.

[Repair radio measurement equipment] Remont radioizmeritel'noi apparatury. Moskva, Gos. energ. izd-vo, 1961. 111 p. (MIRA 14:8)
(Radio measurements—Equipment and supplies)